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II.—*On the Connexion between Ethnology and Physical Geography.* By JOHN CRAWFURD, Esq., President.

MAN will be found savage, barbarous, or civilized, in proportion to the quality of the race to which he belongs, and to the physical character of the country in which his lot has been cast. Beginning with the conditions least favourable to his progress, and rising to those which are most auspicious, I proceed at once to illustrate this principle by a few examples: such a sketch may perhaps be useful in showing the scope of our science.

Mere intemperance of climate, independent of any other obstacle, is sufficient to prevent man from making any advance towards civilization, and to hold him permanently in the savage state. The condition of the inhabitants of the Arctic, sub-Arctic, Antarctic, and sub-Antarctic regions are examples. The Esquimaux is the most striking: dwelling where the year consists but of one day and one night, where snow and glaciers are substitutes for the green earth, where no plant yielding food for man will grow, and, save the dog, no domestic animal live, advancement is impossible. The Esquimaux alone can live in such a region, and only as hunters and fishermen, leading a nomadic life over its vast surface. Under such adverse circumstances, we only wonder at the progress they have made in the arts, with stones, bones, sinews, skins and drift-wood their sole appliances.

There are lands, indeed, which, from mere inclemency, seem incapable of supporting human life at all, and which seem never to have been inhabited. The islands of Spitzbergen and Nova Zembla, within the Arctic, and New Shetland within the Antarctic circles, are examples. Even more temperate Iceland had no aboriginal inhabitants, and was unpeopled until colonised about a thousand years ago; and this by one of the most highly-gifted races of man,—the same that has twice conquered France and England. Iceland supports cattle, but is incapable of producing any kind of bread-corn, and, equal in extent to Ireland, has but 50,000 inhabitants, quiescent but respectable. If instead of being Scandinavians, they had been Esquimaux, or red men, they would have been wandering fishermen and hunters: as white men, they would probably not have been able to live at all had they not brought with them the rude arts of the Scandinavians of the ninth century.

I take my next illustration from a country of a very different character, Australia. The great mass of this continent lies in a temperate region, with well-marked seasons; the rest in a tropical one. The climate of that portion of it which has been tested is one of the finest in the world, and the land is not encumbered with forest, always so formidable an obstacle to the

early advancement of civilization. With these exceptions, it possesses no peculiar advantages: it has no great range of high mountains, and hence no great navigable rivers, while, from the same cause, a vast extent of its surface is an arid desert of sand. Compared to its area, it has but a small extent of coast-line, because little indented by gulfs, bays, or inlets; hence it is wanting in facility of intercommunication. It contained no native plant available to cultivation for human food, and no native animal amenable to domestication, the dog excepted,—of small value in such a climate. Under such discouragements, and without communication with strangers, any advancement in civilization would have been impossible, even had its native inhabitants been of the most highly-gifted races of man. Mentally and physically they are, on the contrary, among the feeblest, consisting of hordes of black, ill-formed, unseemly, naked savages, possessed of no arts, except those which enable them to maintain a bare existence from the spontaneous productions of the earth or the water. Equal in extent to China, the whole population of Australia did not, probably, exceed in number that of a single town of that empire.

Little more than seventy years ago, this distant and unpromising land was selected as a place of punishment for English felons: in due time it was found excellently adapted for sheep, although no native animal of that family existed in it; and chiefly by their instrumentality the population of the strangers rose to half a million. Ten years ago it was found to be rich in gold, a fact which the natives had not discovered, and if they had, the precious metal would have been of no more value to them than the quartz-rock which contains it. The gold has more than doubled the civilized population, and with the wool of the sheep, is exported to the enrichment of the colonists and the world at large, to the yearly value of fifteen millions. At even less than its recent rate of increase, Australia will, in a century's time, contain a population equal to that of the United Kingdom, a wealthy, proud, and formidable nation of Anglo-Saxons,—mighty conquerors, and most probably troublesome neighbours.

The tropical Andaman islands, in the gulf of Bengal, are an example of a land even more inauspicious than Australia itself. With the exception of external form, and of climate not, however, specially favourable, every other condition indispensable to human progress seems here wanting. The country is covered by a dense and intractable forest, produces no plants fit for human food, and not one animal amenable to domestication; indeed, with the exception of small hogs, apes, and reptiles, hardly any large animals at all. The aborigines are a small, feeble race of black negros, in physical form much below even the unpromising Aus-

tralians. These abject and ill-favoured savages are found at no considerable distance from the handsome and long-civilized Hindus, and still nearer to the stout, well-fed, and well-clothed Burmese.

Within the last three years we have ourselves formed a penal station in the Andamans, where there are some good harbours ; and clearing the forest, we have introduced with success the cultivated plants and domestic animals of India,—taking, of necessity, no more account of the natives than of their fellow inhabitants, the baboons. The civilized European will make something even of the unpromising Andamans,—from the creation of man the abode of feeble savages.

In the same southern hemisphere with Australia lies a land of less extent but of far higher attributes than Australia, New Zealand. The two islands which mainly compose it lie within the same latitudes as Italy, Greece, and the Archipelago. Their coast line is deeply indented, furnishing gulfs, bays, and harbours ; their soil is fertile, and high mountains secure a perennial supply of water. With these natural advantages, however, they possessed, when discovered, no native plant amenable to cultivation, or animal capable of domestication ; for the yam, the batata, and the taro (*caladium esculentum*), were imported exotics, and dogs (for want of suitable food, small and few) also were imported strangers. The inhabitants themselves were immigrants from the intertropical isles of the Pacific, as attested by the identity of their physical form and language with those of these islands. For lack of animal food—for they had destroyed the gigantic struthian birds of their country before they were known to Europeans—the New Zealanders betook themselves to eating one another, and were the most open and avowed cannibals on record. They would have been even more abject savages than they were, had they not brought with them the above-named cultivated plants. Without these it is, indeed, difficult to imagine how they could have existed at all ; and in fact, there is no evidence that New Zealand was peopled before their arrival.

Notwithstanding this, our experience of the New Zealanders has shown them to possess more courage and capacity than Europeans have ever found in any other wild race. In these qualities they are a contrast to the feeble and effeminate people of the tropics, from whom they sprang—a difference of character which can hardly have arisen from any other cause than that of a comparatively rigorous climate, necessitating exertion.

The vast continent of America, temperate, tropical, and equatorial, naturally possesses many of the essential properties requisite for the promotion of a high civilization,—deeply indented coasts, high mountain-chains, and the greatest rivers of the world, with lakes equivalent to inland seas. It was, for the most part,

covered with deep forests, unconquerable by the feeble efforts of savages, clear mountain plateaux and prairies being the exceptions. Instead of the many cereals of the old world, it had but a single corn. It had no domestic beast of draught, and virtually but a single beast of burden, of about one-sixth part of the power of the camel, and even this one confined to a mountain region, for which alone it was fit.

There existed, of course, in America no nomadic race in the sense in which we apply the term to Tartars and Arabs. Within fifty years, however, of its discovery some tribes had bred the horse, and now some of the pampas and llanas of South America are infested by robber tribes as dangerous as Bedouins.

But the greatest defect of America consisted in its race of man. Below the negro of Africa in physical strength, and below the Malay in intelligence, the same race, with inconsiderable varieties, pervaded the whole continent from Terra del Fuego to the confines of the Esquimaux. The highest civilization reached by the American race was that which existed on the high plateau of the Andes, but even that was far below the degree which had been attained by second and third-rate nations of Asia; the sufficient proof of which is, that the Mexicans and Peruvians had not invented letters, nor discovered the art of making iron malleable, as all of these had done.

In that portion of America extending from the great chain of lakes to the Gulf of Mexico, where, about two centuries and a half ago, savage hunters alone wandered, there now exists, planted within that comparatively brief period, an Anglo-Saxon population as numerous as that of the country which colonized it, and of the same rank of civilization, a fact which attests beyond all question the natural capacity of this region for developing the highest powers of man. This great and prosperous people imitates the country from whence it sprang in all things,—virtues, vices, and follies. In obedience to this example it is at the present moment shedding its own blood and wasting its own wealth to no rational purpose.

Before the white man, the red one in his rudest state disappears, much in the same manner as do the wild beasts of the forest; but when the inferior race is in too advanced a state to undergo this process the two races intermix, greatly to the detriment of the highest. The present condition of society on the plateau of the Andes is the most striking example of this deterioration.

The huge mass of land which we call Africa, extending over seventy degrees of latitude, although almost an island, has a coast less indented than any other of the great quarters of the globe. It has no high chain of mountains comparable to those of Europe, Asia, and America, and hence no great navigable rivers like theirs.

It wants also their inland seas and great lakes. Much of its area consists of wild sandy deserts, and much of primeval and perennial tropical forest, more difficult for transit than the Sandy Desert itself.

These natural obstacles are hindrances to intercommunication, and therefore to social progress. The races of man which inhabit Africa correspond with the disadvantages of its physical geography. Taking the capacity to invent written letters, to construct durable architectural monuments, and to form powerful states as tests of capacity for civilization, Africa may be briefly sketched. To the north of the chain of the Atlas and bordered by the Mediterranean, we have a narrow slip of land, in climate and productions far more European than African. The aboriginal people of this region, the Numidians and Mauritanians, the ancestors of the present Kabyles and Berbers, were in physical form and mental endowment more European, or perhaps Asiatic, than African. The countrymen of Jugurtha had invented letters, built durable monuments, and acquired such military skill and power as to enable them, sometimes, to defeat Roman armies. Their territorial limits, however, were too narrow, and their political skill too small, to enable them to construct an empire, and for two thousand years they have been subjugated by a succession of invaders.

Egypt, like Barbary, has the advantage of a temperate climate and of the peculiar and perennial fertility conferred by the Nile, without which its narrow valley would, like the country on both sides of it, be a mere desert of sand. The race which inhabited it was less European or African than Asiatic, and in capacity bore a considerable resemblance to Chinese. In so favoured a locality, and with such a people, an early social advancement was inevitable; but the Egyptian civilization was not a vigorous or an enterprising one. The Egyptians were a home-keeping people, who never left their own country, and who, unable to defend it, have been subdued by a succession of invaders for now thirty ages. Had the Jews, a people far more highly endowed, been sufficiently numerous and powerful, which their poor and limited territory forbade, I am of opinion that, instead of being the bondsmen, they would have been the masters of the Egyptians.

The tropical and subtropical land watered by the Nile is inhabited by a race distinct from the Egyptian, the Nubian, black in complexion, but with well-defined features, and wanting the woolly hair, the acute facial angle, the peculiar odour, and other known characteristics of the true negro. Letters and architectural monuments attest an early and original civilization of this race distinct from, but inferior to, that of the Egyptians.

In the tropical region of Abyssinia we find another distinct African race, dwelling on an elevated plain, on a small scale re-

sembling the plateau of the Andes which produced the civilizations of Mexico and Peru. This race, distinct from the Nubian, and still more so from the negro, has produced a civilization of its own, characterised by peculiar letters and a peculiar and durable architecture.

From the southern limits of the Sahara to the extremity of the Continent, Abyssinia excepted, but the great island of Madagascar included, no race of man exists that has invented letters, built durable architectural monuments, or founded powerful commonwealths. Of the races inhabiting this territory, extending over twenty degrees of latitude, by far the most numerous, and to us the most interesting, is the negro, too well known to need any description. Possessed of great bodily strength and power of supporting toil, the history of the negroes would seem to show that their understandings are not in proportion to their physical qualities. They have never reached the civilization attained even by some second- and third-rate races of Asia. Cannibalism, it is not to be denied, prevails among some tribes of them at the present day, while human sacrifices by hecatombs are still practised; almost in sight of the nations of Europe. No systematic and consistent form of religious belief has ever originated with a negro people, and their belief may be described as a mere mischievous magic.

Occasionally, even when propitiously situated as to soil and climate, and generally possessed of the most material requisites to civilization, namely, cultivated plants and domestic animals, it is not easy to account for the inferiority of the negro, not only to the races of Asia but even to some races of their own continent, except by attributing it to inferior mental powers. It is this inferiority, combined with eminent capacity for mechanical labour, that has induced the powerful amongst themselves to make a trade of the weaker, just as other races do of cattle, and which has seduced foreign nations in all ages to engage in the hateful traffic, to abstain from which demands an amount of moral restraint not yet attained by all the nations of Europe, and reached by none of those of Asia. Ten millions of these negroes are now in the New World and its islands, seven millions of whom are slaves, to the great detriment of civilization, whether as regards the slave or his owner.

The great Malayan and Philippine Archipelagos afford many striking illustrations of the connexion between Physical Geography and Ethnology, and I shall adduce a few examples. The island of Java, of volcanic formation, has a range of high mountains extending from one end to the other. This supplies rich plains and valleys with an abundant perennial irrigation, making this island one of the most fertile spots on the globe. In form, Java

is a long narrow island ; and although of half the size of Britain, no part of it is above fifty miles distant from the sea. Its peaceful and docile inhabitants, at present about 12,000,000 in number, have immemorially been in possession of letters of their own invention, and their country contains beautiful architectural monuments, while the political institutions of the Javanese prove by their results that they give no inconsiderable amount of protection to life and property.

Opposite to Java in corresponding latitudes, and not above two hundred miles distant from it, lies Borneo, full six times its size ; but in physical geography of a very different character. Like Africa on a small scale, it is a huge unbroken mass of land, parts of which are five hundred miles from the sea. It has no distinct mountain-range of great elevation, but its surface is a congeries of mountains and narrow valleys. Its geological formation, instead of being volcanic, is primary and sedimentary. It is rich in minerals, if we are to judge by its coal, its antimony, its gold, and its iron ; but the inference from our experience of it is that the soil is comparatively sterile. With the exception of rare cultivated spots, its whole surface, as far as known, is covered with a tall primeval forest, nor is it ascertained that clear plains of any extent exist.

The native inhabitants of Borneo are of the same race of man as those of Java, but written language and architectural monuments are as unknown to them as to the negroes of Africa. Some of them have, however, made a small social progress, domesticate a few animals for food, but none for labour, cultivate a few plants, weave textile fabrics, and manufacture iron ; while others are mere wandering savages, all being homicidal and predatory barbarians.

The Malay peninsula, full double the size of Java, with some advantage over it in form, is generally of the same geological formation with Borneo ; and as to minerals, it is rich in tin, iron, and gold. Like Borneo, it is covered by a dense tropical forest, always, as already stated, a serious and almost insuperable obstacle to the early progress of civilization. The native inhabitants are of the same race as the Borneans, but even lower in the order of civilization.

Immediately east of Java are two small islands, Bali and Lombok, of the same geographical formation, with that island, and like it, having high ranges of mountains, the sources of an abundant irrigation. Of the same race with the Javanese and Borneans, they have letters and monuments, and are virtually in the same state of advancement as the Javanese. Their population, computed at a million, is probably equal to that of all Borneo.

East of the two small islands now mentioned, are the two considerable ones of Flores and Timur, more than four times their extent, but possessing none of their natural advantages for social progress. The inhabitants of these, essentially of the same Malayan race, are a rude people, to whom letters and monuments are wholly unknown.

The Malayan peninsula and some of the Philippine Islands exhibit a phenomenon unknown in any other part of the world, South Africa excepted,—that of two distinct races of man, dwelling, but not intermixing, in one and the same land. These are the Malayan and a diminutive negro: the latter leading an erratic life in the mountains, in as wild a state as that of any tribe of Americans; the first with more or less civilization—even possessing a knowledge of letters.

A far more powerful race of negros than those now named exists in New Guinea, an island almost equal in extent to Borneo, lying nearly in the same southern parallels, as fertile and populous as Java, and divided from Australia only by a strait, not exceeding eighty miles broad. Its outline seems not unfavourable, for it is broken into bays and gulfs, and is of great length compared to its breadth; but the island seems to be without any great chain of mountains, or extensive plains, while it is clad throughout by a deep perennial forest. With the exception of a very few spots on the coast, to which rude Malayan arts have reached, the natives of New Guinea are naked, wandering, and mischievous savages. Race and local disadvantages would seem to have united here against all social progress.

The islands of the Pacific, from New Guinea to the Fejee group, are peopled by negros, always in a lower condition than the brown race which peoples the neighbouring islands, and the greater number of their inhabitants are certainly cannibals. Voyagers have noticed one favourable distinction between these negros and the brown and more civilized race. They were always found honest, while the fairer people were invariably incorrigible thieves.

The brown race in question, proved by identity of physical form and language to be the same from the Sandwich to the New Zealand islands, were found on their discovery (the last-named islands excepted) in a higher state of civilization than any native people of America, except those inhabiting the plateau of the Andes. This advancement they owed to the possession of such cultivated plants as the yam, the batata, the bread-fruit, the taro or *caladium esculentum*, the cocoa-nut, and the sugar-cane, with such domestic animals as the dog, the hog, and common fowl. But like the rudest Americans, they had no domestic animals for labour, and were ignorant of iron and every other metal. Notwithstand-

ing, therefore, a fertile soil and mild climate, cut off, as they were, from all intercourse with more civilized strangers, they could not be expected to have gone beyond the point of civilization which they were found to have attained when Europeans first saw them. Such of them as had no domestic animals, or not an adequate supply of them, were undoubtedly cannibals. The people of the Sandwich Islands, now Christians, certainly were so but eighty years ago.

Advancing to higher civilizations, I may begin with the Persian. Persia is a plateau, generally rising about 3,000 feet above the level of the sea. The greater part of it is within the temperate region, but a considerable portion is sub-tropical. It has been epigrammatically described as consisting of "salt desert, and desert that is not salt." Its very lakes, including the Caspian, are, with few exceptions, saltier than the sea. In these deserts the fertile spots, that is, those that are supplied with water, are few in comparison. To this general character, however, the lands bordering on the Caspian, copiously irrigated from a range of high mountains, are an exception, for they are eminently fertile.

The Persian race is a peculiar one, and among Asiatics a highly-endowed one, personally and intellectually. For five-and-twenty centuries, and probably even a longer time, it has been in possession of letters and the skill to erect durable monuments. But the physical geography of the country is certainly a serious impediment to a stable and lasting civilization, for it not only encourages the invasion, but the permanent settlement within its borders of pastoral tribes, still retaining their nomadic habits. These wandering tribes, differing in language and manners from the Persians, are estimated to amount to a fourth part of the population. This is as if one-fourth part of the population of England were to consist of armed gipsies.

My next example is the country of the Hindus, a land which nourishes two hundred millions of men, but which, like much of Africa and of Australia, would assuredly have been but an arid desert, with pastoral tribes wandering over it, had it not been for the Himalayas and the Ghauts, the sources of those great rivers which have given it soil, irrigation, and means of intercommunication. Hindustan is almost as unbroken a mass of land as Africa itself,—more so than Australia,—and the amount of this disadvantage may be estimated by the fact that its coast-line is less than that of Britain, which is only one-fifteenth part of its extent.

Throughout Hindustan the race of man is probably, in all essentials, the same, with such varieties only as prevail among Europeans, negroes, and the red man of America. The Hindus are a black people, of a deeper tint than any other race of man, the

African and oriental negro and Australian excepted. The form of the head and features are European, even of the highest type, the Grecian, but experience teaches us that there must be an essential difference in the quality of the two brains, although too subtle for anatomy to detect. There is, in fact, no rational foundation for the extravagant theory which would make Hindus and Europeans to be of one and the same race, under the absurd and hypothetical designation of Caucasian: twenty centuries of history belie it.

Above two thousand years ago the Hindus were, according to the measure of Asiatic civilization, a highly advanced people, possessing the evidences of it in an indigenous written language, architectural monuments, and institutions of some skill and great persistency. This civilization probably sprang up at several different foci, perhaps as many as their distinct and independent native alphabets and cultivated tongues. The principal one, however, and that which, chiefly through religion, dominated the rest, seems to have sprung up, or at all events to have acquired strength and maturity, in the clear, open, and extensive upper plains of the Ganges, the Jumna, and the Indus.

In Hindustan, as in some other countries of the East, we find certain rude mountain- and forest-tribes, who speak separate tongues, and have never participated in the civilization of the inhabitants of the rich plains and valleys. Some writers have imagined them to be the aboriginal inhabitants of India, as distinguished from the civilized majority fancied to be invaders and intruders. This is, however, a mere hypothesis, for the rude tribes really differ in no essential way from the cultivated, to say nothing of the difficulty of bringing the supposed invaders from a foreign land, seeing that out of Hindustan there neither exists now, nor has ever been known to have existed, such a race as the Hindus.

The plateau of the Himalayas affords examples of forms of civilization with races differing from the Hindus. In the lower valleys we find such people as the Goorkas and Booteahs, a short, squab race, of brown complexion and with oblique eyes; and on the most elevated plain, the short and sluggish Tibetians, with a still nearer approach to the Tartar form. Both have immemorially possessed letters and permanent monuments; but especially as concerns the country of the Tibetians, a cold and sterile region, in which none but the hardiest of the domestic animals can live and multiply (even they only because nature has protected them with a thick under fur) has, necessarily, yielded a civilization very inferior to that of the rich alluvial plains of Hindustan.

Between Hindustan and China lies an extensive region, inhabited by a distinct race of man, by nature less favoured than those of either country. It is throughout tropical, generally without any mountain-chain of great elevation, forest-clad, and without open, clear plains, and having, consequently, no rivers comparable for magnitude and utility to those of India and China.

The native race is here of shorter stature than the Hindus or Chinese, of tawny complexion, but never black. The people who have made the greatest advances among them, and who have been immemorially in possession of their own peculiar letters and monuments, are always to be found in the alluvial valleys of the principal rivers. Such are the Burmese on the Upper, and the Peguans on the Lower Irawadi; the Lao on the Upper, and the Siamese on the Lower Menam; the Cambodians on the Mekong; and the Anam on the rivers of Tonquin and Hué. The rest of the country, consisting of mountains and narrow valleys, is thinly peopled by wild, unreclaimed, often predatory, and always unlettered tribes, speaking distinct languages. These are essentially of the same race as the more cultivated nations; their inauspicious localities alone have hindered them from making the same social advancement.

We come next to the highest civilization of Asia, that of China, the joint result of superiority of race and favourable physical geography. The high mountain-chains of China, often rising to the snow-level and chiefly lying to the west, are the sources of the great rivers which fertilize spacious alluvial plains, and nourish millions of men. It was no doubt in these plains that first sprang up that peculiar civilization which has spread over a region twenty times the extent of Britain, and numbering full sixteen times its population. With respect to the quality of the race itself, it far exceeds all other Asiatic ones in bodily strength, in capacity for labour, in ingenuity, and in power of supporting vicissitudes of climate, for we find it thriving alike under the heat of the equator and the cold of the fiftieth degree of latitude.

It is almost superfluous to add that their knowledge of letters peculiarly their own, is of immemorial antiquity. For ages, too, they have had the capacity to erect great and enduring structures. Their foolish wall, to keep out the shepherds of Tartary, compared to which, in magnitude at least, the Pyramids are but mole-hills, was constructed two hundred years before the birth of Christ. The superiority of their political institutions is proved by their fruits—a progress in the useful arts, and an accumulation of wealth such as have never existed in any other Asiatic nation.

In China, as in India, and as in the region which lies between both, we find rude, unlettered tribes, who, although of the same

race as the Chinese, have not participated in their civilization. These mountaineers, for such they necessarily are, abound chiefly in the less favoured provinces of the west, where the great rivers have not yet attained the magnitude which confers fertility and means of communication.

The fertile volcanic island of Formosa, for about three centuries only a portion of the Chinese Empire, affords a striking exemplification of the different capacities of different races. Its aboriginal inhabitants, still to be found in its mountains, and occasionally even in its plains in servitude to the Chinese, were a rude people of the Malayan race. The Chinese (the way to it, strange enough, having been shown to them by the Spaniards and Dutch) began forthwith to colonize it, and the colonists who are now computed to number as many inhabitants as Scotland, export to the over-peopled continent corn, cotton, and sugar, as did Sicily, which Formosa equals in size, the first of these articles to Rome.

The Japanese, although resembling in some respects the Chinese, must be considered a distinct race of man, both as to physical form and mental capacity. Although the majority of them live in a climate the same as the south of France, they are never fair-complexioned, and never have any hair that varies from a jet black, facts which show plainly enough how little colour depends on climate.

The Japanese Archipelago is a mountainous country, abundantly watered, with fertile valleys, although these are of no great extent. Its coast, for the size of the country, is extensive, far exceeding that of any other part of Asia, abounding, in short, in straits, gulfs, and harbours. The Japanese Islands are about double the extent of the British, but their population is hardly greater, and is scarcely one-half that of the most populous of the provinces of China. In mere populousness, China would equal, at least, sixteen Japans.

The Japanese have been known to us for little more than three centuries, and the existence of their country before then was as little suspected as that of the New World itself before its discovery by Columbus. They were then nearly what they are now, a civilized people, in possession of a written character of their own, with abundant architectural structures. Yet their civilization is not only inferior, but different in kind from that of the Chinese. Thus, instead of the equality of ranks which prevails with the Chinese, the Japanese are divided into civil castes, as impassable and immutable as the religious ones of the Hindus. They are imitators of the Chinese, for they have, in a great measure, adopted their literature, their philosophy or religion, and even their very inconvenient written characters. They would not

have been imitators if they had not been conscious of Chinese superiority.

We know too little of Japan to be able to tell whether there exist in the principal islands any rude, unlettered tribes of the same race with the Japanese, such as are to be found in India, in China, and in the region which lies between them. The island of Yesso, the most northerly of the large islands, is but a comparatively recent conquest of the Japanese: in it the Japanese are but colonists, the aborigines being a distinct race, so low in the social scale that the Japanese hold them in as little respect as do Europeans the Red Man of America, the Hottentot, or the Australian.

We may contemplate for a moment, as a matter of curiosity, what might have been the condition of Japan, with its many natural advantages, had it been peopled by Europeans instead of Japanese. Instead of being the most stationary and home-keeping people in the world, the people of Japan would in such a case have certainly been a potent, enterprising, and ambitious nation, dangerous and troublesome to all its neighbours.

From the Sea of Japan to the Caspian there exists a vast region, for the most part of steppes and sands. This is the native country of the Tartars and the Turcomans, men of squab form, snub noses, oblique eyes, and yellow complexions—men who, for the most part, dwell in tents, and whose normal condition is as migratory as that of birds of passage. Although immemorially in possession of the horse, the camel, and the sheep, the very physical character of their country would seem to condemn them in perpetuity to the pastoral condition. Always rude and unlettered at home, they have never acquired any considerable measure of civilization, except when transplanted into more genial regions than their own.

The huge peninsula of Arabia, ten times the size of Britain, although a tropical or sub-tropical country, much resembles Tartary, in the frequency of its deserts and the fewness of its fertile or watered spots. The habits of its inhabitants, therefore, are generally pastoral, like those of the Turks and Tartars. The Arabs were unknown to history except as freebooters, until as Gibbon expresses it, their leader “breathed the soul of enthusiasm into their savage bodies,” and then their conquests in a short century’s time, spread far and wide, until they reached India and embraced Spain and Sicily.

The highest civilization which the Turks ever attained was in Eastern Europe, and in Northern India: the highest which the Tartars reached was in China; the Arabs in Spain.

Europe is the quarter of the globe which, through the great advantages of superior physical geography and superior quality of

race, has attained the highest measure of civilization. Its extensive seaboard, caused by deep gulfs and inland seas; its numerous lakes and rivers; its many islands, with a temperate climate, afford it means of industry, commerce, and intercommunication possessed by no other part of the world.

The superiority of its races of man is attested by an experience of three thousand years. In the qualities of these races among themselves there is, probably, no material difference; sufficiently proved by the fact that no deterioration follows their intermixture, as shown in the instances of the very bastard people whom we call French and English.

The term Europe, however, is but a conventional and not a very well defined one, and the advantages of physical geography and race which I have ascribed to it belong especially to its southern portion, always its only seats of high civilization. The sterile and oft ice-bound far north has never produced, and seems incapable of producing, a great and powerful civilization. In its extremest parts, indeed, independent of rigorous climate, we have two inferior races—the Laps and the Samoeds, in their native locality hardly amenable to civilization. Yet from the rigorous north has emanated one of the most highly endowed races of man, that which overthrew the huge structure of the Roman Empire, which in later times conquered a large portion of France and the whole of Britain, and to which, above all other causes, is owing the vigorous civilization of modern Europe and Northern America.

The Russian Empire is no exception to the rule that the far north has never produced a high and powerful civilization; for it is not at once powerful and civilized. It is an aggregate of nations and rude tribes, held together by the power of the sword, like the empires of Jengis and Timur, only far more skilfully administered. Its real power is confined to the people whose tongue is Russian, and it by no means adds to its strength or civilization, that its dominion embraces the frozen lands, wide deserts, and rude tribes which embrace the 7,000 miles lying between the Baltic and the sea of Okotsk.

The vast superiority of the European over the other races of man, and especially over the precocious but soon stagnant races of Asia, need not be insisted on at length, and I shall confine myself to a few modern instances. Thus, but for the European race, the old and new world would have been unknown to each other: that race has conquered the whole New World and largely peopled it with men more civilized, more powerful, and far more numerous than its aboriginal inhabitants.

But for the European race, China would have been known to the rest of the world only by report, and Japan and the great

Indian Archipelago as unknown as America. A mongrel section of the race, whom we call English, conquered, in the short space of a century, two hundred millions of men, comprising one of the most civilized races of Asia, and holds them in permanent subjection by a civil and military force, which has never exceeded one hundred thousand in number. Last year two of the nations of Europe sent a small army to a distance of sixteen thousand miles, and at his capital dictated a treaty and levied a heavy contribution on the lord of four hundred millions of the most advanced of all the Asiatic races.

While the European nations have virtually subdued all America, discovered and conquered a fifth part of the globe, Australia, and conquered and occupied a considerable portion of Asia, no foreign race can be said to have invaded and permanently settled in Europe. The invasions of the Tartars under Attila were but plundering expeditions on a great scale, and the barbarians were defeated by a Teutonic race in the heart of France. The Saracens held a portion of Spain for eight centuries, never successfully getting further into Europe, and were eventually expelled. Within a century of the death of that man of genius, the Arabian camel-driver, who inspired them to foreign enterprise, they had the presumption to venture as far as the centre of France, where by the hammer of God, in the person of a Frankish chief, Charles Martel, they were knocked on the head, as if they had been so many wolves.

The Turks conquered the weakest and most degenerate portion of Europe, and beyond this have never succeeded in penetrating, notwithstanding many attempts. They have been in Eastern Europe about half the time that the Saracens were in Spain, but, in the true character of an Oriental race, they either refuse or are unable to keep pace with the European races, and, now existing only by their sufferance, absorption or expulsion is their inevitable fate.

The races of Asia have borrowed little from Europe,—a fact which affords incontestable evidence of their incapacity and inaptitude. I can quote but two notable exceptions—fire-arms and tobacco, both of which they promptly adopted on the first opportunity. They reject the printing-press, obstinately persevering in the slow and expensive manuscripts which in Europe impeded the progress of knowledge five hundred years ago. They very rarely use the mariner's compass, but steer along the shore, or trust to the stars and the monsoons.

The European races have, on the contrary, borrowed freely from every country that had anything good to give. From Asia the list of our adoptions is large; from it we have derived cotton and the cotton-manufacture; silk and the silk-manufacture;

paper—without which the printing-press would be worthless ; the art of distillation, very useful although tempting to indiscretion ; the sugar-cane and its extract ; tea, coffee, spices, and opium. Nor must the domestic fowl be omitted, for that valuable acquisition is of Asiatic origin.

To America we owe the potato, maize, the cinchona, tobacco, and the turkey ; and to Asia and America jointly all our most valuable dyes. To Africa our obligations are smaller ; but palm-oil, the gallinacæ, and the ass, may be named with respect.

As to the invention of written language and to monuments of a high order, the only parts of Europe which boast of having possessed them are Greece and Italy, which in the march of civilization so long preceded all the rest. The nations of Europe, now the foremost in letters, were (the Runic characters excepted, which probably never extended beyond the priesthood) as ignorant of them two thousand years ago as were the Mexicans when first seen by Europeans. In this respect, as indeed in architecture, they have been but dexterous imitators. This is a striking contrast to the precocious races of Asia, many rude tribes of whom, less civilized than the ancient Gauls, Germans, and Britons, have been in possession of alphabets of their own invention from time immemorial.

But the most favoured parts of Europe, even those which are now the seats of the highest civilization, afford, like India and China, examples of civilization retarded through disadvantage of physical geography, without any proved inferiority of race. Our own island yields two signal instances, Wales and the Highlands of Scotland. Had the whole area of Britain been no better than they, it is quite certain that we could not have been what we are, powerful, opulent, populous, and great. Their inhabitants, compared with those of the fruitful parts of the island, were as the Gonds and Garrows of India to the Hindus, or the Myo-tse of China to the Chinese. From their courage and localities they were difficult to subdue, and their unavoidable poverty offered no temptation. It is only by slow degrees, and the influence and example of a more advanced nation, that a people so circumstanced is brought within the pale of civilization. The process is, at present, in rapid advancement in the mountains of Wales and Scotland, even to the beneficial extinction of their barbarous, although masculine and forcible, tongues ; but it has taken eighteen centuries to bring the Welsh and Highlanders to their present state from that they were in when Gibbon describes one of them (and the other was probably little better), as consisting of “troops of naked barbarians” who “chased the deer of the forest over cold and lonely heaths, amid gloomy hills and lakes covered with a blue mist.”

Sir EDWARD BELCHER was at issue with Mr. Crawford as to the abilities of savage races; and he thought that, if some of those races had the same advantages of education and communication as we have in England, they would be equally capable of civilization with ourselves. The Esquimaux, with the rude tools at their command, executed better workmanship than we could with better tools, as was exemplified in their arrows, bows, canoes, and houses. They were certainly not such great fools as some people were inclined to consider them; on the contrary, they were much more inclined to be roguish. With respect to the New Zealanders, he considered they had come down with the trade-winds from Taheite. The gods, idols, and habits of the inhabitants of the latter were the same; and any one who could understand their language, could understand the language of the New Zealanders.

Mr. BURKE considered the President's paper had thrown them into a wide sea of controversy, by its indirect attacks on some of what have been considered fundamental principles of Ethnology. This paper does not exactly say that climate and geographical situation are the causes, nor that primary distinctions of race are the causes of the present characteristics of races; its doctrines are so ambiguous, that the advocates of opposite opinions can find support for their several views. That there is a connection between the quality of a race and the nature of the country it inhabits is perfectly plain; and if there be wisdom displayed in the distribution of mankind, that is what ought to be the case. If to the different human races different qualities have been assigned, then races should be placed in positions suitable to those qualities. Ethnology differs not in its principles from Zoology and Botany; the earth has been divided into geographical regions, each with a fauna and flora peculiar to it. If we examine these we shall find nothing in them calculated to cause special creation. There is nothing in the physical state of an area to create tigers, for instance; if there were, then the whole fauna of that area should consist of tigers. But if a portion only of it so consists of tigers, and in the same area we have many other different animals living under the same climate and similarly localized, we may therefore expect to find man localized, if we suppose Nature to have created different races and to have placed them in different geographical positions. And so placed, we can understand how unfavourable geographical positions would retard the advance of any race. While ethnologists are skirmishing on the outskirts of their science, leaving its foundations and main principles untouched, they cannot arrive at any satisfactory result. On comparisons of races and climatal and physical conditions, discussions might last for months, and no result would accrue unless ethnologists went to the essentials of the question. It is the fault of our science that we have been skirmishing on the outside. Mr. Burke agreed that the European races are superior, but he disagreed with the President's opinions on the amalgamation or interblending of races. The blending of races is a chemical phenomenon, and therefore obeys the chemical law of harmonic, unequal proportions; the consequence being that, in two or three centuries, every trace of the slighter infusion may be obliterated. The invading race must vanish. Races were as distinct now as thousands of years ago—we were as much British now as before the invasion of Julius Cæsar.

Mr. CHRISTY could personally add strong proof of the deterioration of races in the case of the mixture of the Spanish and Aztec races. But this was to be explained by the majority swallowing up the minority. Up to the revolution of forty years since, Spain did not allow her colonists there to mix in trade; and there were many other collateral circumstances,

which should give caution against attributing too much to the natural deterioration of races.

Mr. CULL thought that the people who bring civilization with them will become the dominant people.

Dr. HUNT said, the question before the Society was, not that of the amalgamation, nor that of the hybridization of races—the question was, Was there a relation between Geography and Ethnology? and if any, What is it? This the author of the paper did not decide. He only says, for example, that the inhabitants of Africa, in their lowness of grade, are in harmony with the physical deficiencies of that country, which no one can dispute. But, Is the cause physical or inherent? and Can a race rise superior to such disadvantages? On this point the President's remarks were not decisive. The great question to be decided was, whether the people of Europe, if so placed, would descend to that level, or rise superior to it?

Capt. PARKER SNOW felt it his duty to rise when, in remarks made about the natives of distant lands, they were placed so low down in the scale of intellectual capacity. He could confirm what Sir Edward Belcher had said as to the right of the Esquimaux to be considered in a superior light than they were commonly regarded. The Fuegians, too, were not to be looked upon as so very contemptible. Admiral Fitzroy had described them in his account of the coast of South America, in the "*Voyage of the Beagle*", as a fine race; and he had seen fine examples of their skill and workmanship. The Australian, too, far surpasses the usual low estimate formed of him. He thought it the duty of travellers, and those whose duties caused them to wander about the globe, to study and record the good with equal zeal and justice, and not to view only the side of the bad. Many wild races only required to be instructed, and to be profited by good examples, to become as accomplished people as Europeans.

Dr. MACGOWAN remarked that the population of China was usually stated at about four hundred millions. This statement was derived from Russian sources, and, although it had been received by Sir J. Bowring and others as correct, the fact was that, in four provinces at least, no census whatever had been taken; and these results, at best, therefore, could be no more than conjectural.

The Rev. BRYMER BELCHER could not agree to the doctrine of there being any inherent difference of any one race from another. On the contrary, he believed that all were of one blood, and adapted to dwell on the whole face of the earth. The great differences were attributable to differences of climate, and to varying conditions of physical geography. He asked, however, the question, How was the superiority between certain families of the earth over others to be accounted for? The term "bastard", applied to the Saxon race, grated on his ear; but if there were any inherent superiority in the Anglo-Saxon race, he believed it was given it by the Divine pleasure for the accomplishment of some good work on this earth. God had given first to one race a superiority at one time, and then to another at another time. First to the Assyrians, then to the Greeks and Romans, now to ourselves. It was the nations that had adopted Christianity that had been raised to the highest conditions of superiority; and wherever the Christian nations set foot they will not degenerate.

Dr. RICHARD KING consented to the designation of our race as mongrel; it was therefore that it had taken the position it had done. Purity of race was completely ideal; it might be very flattering to our pride, but, if tested, it would not hold ground. The President had placed the Chinese in a very high position, and the Esquimaux were a colony of Chinese. He considered their snow houses, their weapons, and other examples of their

workmanship entitled them to take a high rank for intelligence. The Australians were not the low creatures they had been represented to be. They were quite equal to the Red men. We must not select our examples from the degenerate individuals on the borders of our civilized colonies; but from high up on the rivers, where the finest anatomical examples in the world were to be met with.

Dr. HODGKIN had no doubt that the effects of geographical advantages in modifying inhabitants will be found to depend on the variety of man subjected to their influence. Different races seem to be called up at different periods. There was a time when our race consisted of such savages as are now brought under notice for the lowness of their civilization. What were the forces which had elevated it? For his part, he thought the elevation had been effected by the addition of the Norman race. The many questions raised by this paper were not to be put down by theological condemnation, but deserved to be inquired into.

Mr. A. J. ELLIS thought the only way of settling ethnological questions, was by examining the conditions going on around us, and, arguing backwards, to apply the results of present observations to the conditions of past ages. It was in such cases as the migration of the English to America and Australia that the effects of climate on race were to be looked for; and it was there that the proofs of such changes were to be discovered.

Mr. S. J. MACKIE thought some comparison might be made, in the consideration of the effects produced on races by climate and physical geographical conditions, with those isolated groups of plants and animals which naturalists had regarded as centres of creation, and to which ethnic centres might be comparable. As the circles of distribution of human races spread wider from their centres, some portions of the races becoming stationed in favourable localities might develop themselves into special varieties, and when the traces of their progression from their former sources were cut away by the lapse of time, these developed portions would appear as distinct races.

Mr. AMEUNEY considered that the habits of people were not born with them. The inhabitants of the Mount Lebanon district, he thought, were as great savages as any that existed; he meant both the Druses and the Maronites—they were both equally bad. Ten days since, he had a letter from a lady, now in England, who had opened a school on Mount Lebanon. When he visited her, he found there a young lady, whom he thought as beautiful and accomplished an Englishwoman as he had ever seen. When leaving, the lady asked him what he thought of her daughter; and he replied what he had just thought. The lady then informed him of her native origin; and, on speaking to her in the language of that country, he was answered in the broadest Arabic. The young lady had been taken, five years before, completely from the country, from taking care of cows, and had been educated at the English lady's school. She conversed freely and sang in English, played excellently on the piano, and was as accomplished as the ladies met with in London circles. How, he would ask, had the change come upon her? If it be asserted that savages were incapable of learning, how was this to be accounted for? Savages may be savages if so born and educated, but the contact with civilized people elevates and tends to equalize them with their superiors.

The PRESIDENT then replied to the various speakers. Sir Edward Belcher estimated the Esquimaux much more highly than he did. They were no doubt very respectable people, but they live on blubber, and drink oil; and if they came here, and lived on wheaten bread, they would die off in a short time. The New Zealanders had probably come from 'Tayti, and it was the climate of their new territory that had made them an effective race. Mr.

Burke had spoken about mongrels. He (the President) had said the European races were very highly endowed, and were probably all equal in quality as races. The Celtic, if left alone, would have attained, under the same circumstances, the same degree of civilization. There were Highlanders now not in any way inferior to the Anglo-Saxon. The Rev. B. Belcher had spoken of the superiority of races, but that superiority was of different kinds. The Oriental was far more precocious, but inferior to the European. The Hindu superiority took place two thousand years before the Greek or Roman, but was by no means equal to the latter, and still less to the civilization of the English and French. On colour climate has no effect. The Australians are all black, at the same parallels of latitude as the Europeans are white, and the Chinese yellow. The American Indians are red, from Terra del Fuego to the Esquimaux. The Esquimaux were rather darker than the Malays of the Equator. He could not say why all the swans of Australia were black and had red legs, while those of Norway were white and had black legs. He had no doubt it was for a good purpose, but he had no theory to propose. Dr. Hunt has some doubts whether the European race can flourish in Australia. Children were born of the second and third generations, and were as good and as strong as any Englishman's or Scotchman's. Mr. Ameuney did not tell us he was quite sure of the young lady's origin.

Mr. AMEUNEY. Yes! yes!

The PRESIDENT. There was no absolute savage in the Lebanon.

A vote of thanks was then given to the President for his paper, and the meeting adjourned.

DECEMBER 5TH, 1861.

JOHN CRAWFURD, Esq., President, in the Chair.

THE Minutes of the last Meeting were read and confirmed.

The following presents were announced, and the thanks of the Society ordered to be returned to their respective donors.

Bernier's *Travels*, 2 vols, in 1 (presented by J. Crawford, Esq.)—Hamilton's *Account of the East Indies*, 2 vols. (Ditto.)—Dampier's *Voyages*, 3 vols. (Ditto.)—James Kennedy's *Essays* (the Editor, C. M. Kennedy, Esq.)—*Lectures and Reviews*, by R. Whately, D.D., Archbishop of Dublin (the Archbishop of Dublin)—*Human Skulls*, by J. B. Davies, F.S.A. (the Author.)—*Discours de M. Gavin de Tassy*. (Ditto.)—*Braziliensche Instande und Ausfichter in Jahre 1861*. (Ditto.)—The *Literary Gazette*.—The *London Review*.

The following new Fellows were announced:—John Baker, Esq., Member of the Legislative Assembly of New South Wales; George Ford Copeland, Esq., F.R.C.S.; F. Mouat, Esq., M.D., Inspector of Indian Gaols; Bath Charles Smart, Esq., M.R.C.S.